

# CLAIMS

1. A large-dimension image sensor operating by relative translation of the image with respect to the sensor, comprising a plurality of individual monolithic chips (P1, P2, P3) each capable of detecting a linear image portion perpendicular to the translation direction (Ox); the individual chips being arranged in two groups, the chips of one group being aligned in order to detect aligned image portions and the chips of the other group being aligned in order to detect other image portions which are aligned but offset with respect to the chips of the first group in the relative translation direction, the chips of the second group being arranged in a staggered fashion with respect to the chips of the first group so that all the chips of the first group lie beside at least one chip of the second group, the chips each being mounted on a package, connection wires being connected between connection terminals of the package and connection terminals on the upper surface of the chip, characterized in that the upper surface of the package, on which the chip is mounted, comprises a principal part the shape of which is an elongate rectangle whose length is less than the length of the chip and whose width is greater than that of the chip, all of the connection terminals of the package (34) lying inside this rectangle along the chip, all the chips having two ends protruding from the rectangle, a protruding end of a chip being adjacent, via a side parallel to the row of chips, to a side likewise parallel to the row of chips of the protruding edge of another chip, the packages being identical and juxtaposed without reversal.

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2. The image sensor as claimed in claim 1, characterized in that the package comprises two extensions (30, 32) adjacent to the rectangular

principal part, this extension extending under the protruding chip part.

3. The image sensor as claimed in claim 2,  
5 characterized in that the extensions are slightly wider and longer than this protruding chip part under which they lie.

4. The image sensor as claimed in claim 3,  
10 characterized in that the width of the extension of the package is from about 50 micrometers to 200 micrometers more than the width of the chip.

5. An image sensor comprising a plurality of  
15 linear image detection arrays associated in order to form a linear image sensor with a length greater than that of each array, characterized in that the arrays (P1, P2, P3) are mounted on packages (B1, B2, B3) whose upper surface has an elongate rectangular shape  
20 provided on two opposite sides of the rectangle (24, 26) with two extensions (30, 32) substantially covered by the ends of the array, two packages being adjacent via a respective extension of each of them, no connection terminal being present on the packages in  
25 the region of the extensions, and the packages being identical and juxtaposed without reversal.